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JOURNAL PAPERS

- A. Raza, K. Zhong, S. Ghafoor, S. Iqbal, M. Adeel, S. Habib, M. F. Butt, and C. Lu, "*SER estimation method for 56 GBaud PAM-4 transmission system*," Chin. Opt. Lett. 16, 040604- (2018) **(ISI_Indexed)**
- M. Adeel, Zulfiqar Ali, Tamim A. Khan, "*Mitigating ISI In Cellular Networks For a 3D Scattered Model*", Sc. Int, 27(5), Issue-05, pp.4171-4175, May 2015 **(ISI-Indexed)**

CONFERENCE PAPERS

- M. A. Rafique, H. ul Hassan, I. Noor, M. Adeel and M. Ajmal, "Introducing Bandwidth Efficient Frame Structure (BEFS) algorithm for IRIG-106," *2017 14th International Bhurban Conference on Applied Sciences and Technology (IBCAST)*, Islamabad, 2017, pp. 758-763.
- M. Adeel, Zulfiqar Ali, M. Saqib, M. Tauseef, M. Muaz: *Exploiting cross-over distance to optimize energy in wireless sensor networks*. Digital Information Management (ICDIM), 2013 Eighth International IEEE Conference on; 01/2013
- M. Adeel, G.M. Khan, S.M.M. Bokhari, Z. Shafiq, S.A. Mahmud: *Feature Point Video Synthesis for tagged vehicular traffic*. ITS Telecommunications (ITST), 2013, 13th International IEEE Conference on; 01/2013
- M. Adeel, Aamir Latif, Muhammad Muaz, Sahibzada Ali Mehmud: *Energy Gain Enhancement by ECC Coded Data in Wireless Sensor Networks*. Proceedings of the 2012 10th International Conference on Frontiers of Information Technology; 12/2012
- M. Adeel, S.A. Mahmud, G.M. Khan: *Condition of Constant Frequency of Rician Channel Variation Achieved during Inter-Vehicular Communication*. Vehicular Technology Conference (VTC Fall), 2012 IEEE; 01/2012
- M. Adeel, S.A. Mahmud, G.M. Khan: *Adjacent Vehicle Collision Avoidance Protocol in Mitigating the Probability of Adjacent Vehicle Collision*. Vehicular Technology Conference (VTC Fall), 2012 IEEE; 01/2012
- M. Adeel, M. Muaz, Aamir Latif, Sahibzada Ali Mahmud: *Sensitivity Level Enhancement in Vehicular DGPS Receivers to Provide Exact Location Tracking on Sub-lane of a Highway*. Frontiers of Information Technology (FIT), 2012 10th International Conference on; 01/2012
- M. Muaz, A. Rehman, M.A. Shah, M. Usman, M. Adeel, G.M. Khan, S.A. Mahmud: *Power efficient dynamic topology in 3G cellular networks*. ICT Convergence (ICTC), 2012 International Conference on; 01/2012
- M. Adeel & M. Muaz: *Selecting Optimum Distance between Transmitter and Receiver of a Wireless Sensor Network Depending on different modulation schemes*", International IEEE Conference on Applied Modeling and Simulation, 2011.
- M. Adeel & M. Muaz: *Performance Comparison of OFDM systems based on Optimized Pilots over Rician and Rayleigh Fading Channels*. Information and Communication Technologies, 2011. ICICT 2011. First International Conference on; 07/2011.

WORK EXPERIENCE

Organization: Advance Engineering & Research Organization

Designation/Tenure: Manager, May, 2010-to-Aug, 2016

Organization: CISNR Lab, UET Peshawar

Project: A secure and Intelligent Transportation System Using Wireless Sensors for Congestion Control

Designation/Tenure: Research Assistant, March, 2012 to June 2014

Organization: CECOS Institute of IT and Emerging Sciences, Peshawar, Pakistan

Designation/Tenure: Lecturer, Aug, 2009 -May, 2010

Organization: Bahria University, Islamabad, Pakistan

Designation/Tenure: Lab Engineer, Sept, 2008 to June, 2009

EDUCATION

- **Ph.D (Distributed Acoustic Sensing)** (2016- 2019)
- *Institute:* The Hong Kong Polytechnic University, Hong Kong.
- **MS Electronics Engineering** (2008- 2010)
- *Institute:* Mohammad Ali Jinnah University, Islamabad, Pakistan
- **Bsc Electrical Engineering [with Honours]** (2003-2007)
- *Institute:* University of Engineering & Technology Peshawar, Pakistan.
- **Higher Secondary School Certificate** (2001-2003)
- *Institute:* Board of Intermediate and Secondary Education, Peshawar, Pakistan
- **Secondary School Certificate [With Distinction]** (1999- 2001)
- *Institute:* Board of Intermediate and Secondary Education, Peshawar, Pakistan

PROFESSIONAL TRAINING & CERTIFICATES

- CISCO (CCNA & CCNP) – Jan 2006 to Aug 2008
- Data Acquisition and Telemetry – July 2010
- Ground Vibration and Flutter Prediction – Nov 2010
- FPGA Programming in Verilog HDL – Sept 2012
- Geographic Information System (Mostly applied to UAVs) – Aug 2015

SKILLS AND TOOLS

LabView & Matlab:

- Designed Fatigue Testing Data Acquisition Software in LabView.
- Designed Vibration Testing Software in LabView.
- Written several data-cleaning Soft-wares in MATLAB used to clean acquired raw-data.
- Designed GUI based Flutter Flight Test Software in MATLAB used in post-flight processing.
- Several pre-simulation MATLAB coding in Research work related to Digital Communication, DSP, Vehicular technology and Intelligent Transportation System.

R Studio

- Applied several Classifiers in different applications included Cancer/ Tumour Detection etc and Distributed Acoustic Sensing.
- Feature Engineering was used extensively and for boosting classification accuracy.

Embedded System Design Tools

- Hardware Prototype and Verilog Programming for Flight Control Computer, Smart Serial Merger, On-Board data-recorder and air-borne Software-Defined-Radio, with further designing in Proteous, Multi-Sim, NVIDIA and XILINX-ISE (4 years project).
- Various small projects related to Hardware Designing in Multisim, Pspice and XILINX-ISE
- Designed an FPGA based system to predict Vehicular Malfunctioning using Speech/Sound Signal Processing.

Visual Studio (C++ and C#) and JAVA Programs

- Worked as freelancer for few years and implemented the tools like Java and C#.
- Developed some confidential level projects, aimed in securing the file security systems at organization level.

Networking Tools

- Designed a lot of networking scenarios in Packet-tracer and wire-shark for emulation/simulation purposes.
- Hands-on-Lab experience on real CISCO routers, L2-switches and multi-layer switches.
- Working directly on SUMO by implementing concepts related to Intelligent Transportation System.

Other Tools

- Experience on working with software-coding control softwares like GIT and Bugzilla.
- Used many research oriented tools like Zotero, EndNote, Mendley and Latex.

Tools with Supervising Level Experience

- There are tools which I have utilized on different projects on managerial level but I lack the hands-on-Lab experience. These tools involve PHP, Opnet and programming on DSP-Kits but having well known understanding on management level.

INDUSTRIAL MANAGEMENT EXPERIENCE

Operational-Incharge at following R&D projects:

- Establishing IP networks on Core Layer level for corporate organizations.
- Working directly as Research Assistant for ICT R&D funded project related to Intelligent Transportation System.
- Data-Analyst in observing and applying signal processing techniques to vibrational, stress, pressure, temperature and serial data for more than 04 different projects.
- Cleaning and extracting static and live data by designing software and hardware prototypes for dozens of projects.
- Managing and control of Qualification Tests including Thermal, Vibration and EMC testing.
- Working directly in designing hardware/software prototypes for various projects
- Experience of Finalizing Control management and documentation for five or more subjects including BHD, MRI, system-tree and associated sub-documents.
- Experience of Interacting directly with quality control engineers for quality control and management for 2 projects.
- As Industrial Supervisor from NESCOM for supervising students of rank#1 university of Pakistan (PIEAS) for their final year project.

REFERENCES

- Chair Professor Chao Lu,
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- Assistant Professor, Sadeeq Jan
University of Engineering and Technology Peshawar Pakistan
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